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AFRL names seven among its 2003 fellow nominees

by Jill Bohn, AFRL Public Affairs

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — The Air Force Research Laboratory has named seven of its top scientists and engineers to the status of AFRL Fellow.

Fellows for 2003 are Wayne Bonser, Information Directorate, Rome Research Site; Dr. Gail Brown, Materials and Manufacturing Directorate, Wright-Patterson Air Force Base; Dr. Raymond Gordnier, Air Vehicles Directorate, Wright-Patterson Air Force Base; Dr. Kirk Hackett, Directed Energy Directorate, Kirtland Air Force Base; William McQuay, Information Directorate, Wright-Patterson Air Force Base; Dr. Robert Pugh, Space Vehicles Directorate, Kirtland Air Force Base; and Dr. Jeffrey Zabinski, Materials and Manufacturing Directorate, Wright-Patterson Air Force Base.

Bonser has been selected, in part, for his role as a national leader in the development and application of software radio technology with countless transitions and transfers. His insight that growth in hardware complexity was hindering rapid progress in new waveforms was used to shift development toward the innovative idea of software-defined radios.

Brown has been recognized for cutting edge research on superlattice materials for the next generation of infrared sensing. Her research has resulted in significant advancements in the fundamental physics, design parameters, and growth processes for type-II superlattice materials.

Gordnier was selected in recognition of his exceptional and sustained scientific contributions to the field of multidisciplinary computational sciences. His specific areas of expertise include the simulation of unsteady aerodynamics and fluid-structure interactions, critical elements in the understanding of air vehicle containment and performance.

Hackett has been recognized for his significant technical contributions and visionary technical leadership in the areas of high power microwaves and non-lethal weapons development. His research has been crucial to the development of Active Denial Technology.

McQuay was chosen for producing significant advancements in modeling and simulation technologies and collaborative sciences. His advanced simulation capabilities and analyses have led to the discovery of overlapping enemy emitter parameters, resulting in misidentification of threats, and thereby creating new requirements for receiver/possessor design specifications for the F-16 and B-2, and many others.



Pugh's contributions to AFRL have made a major impact on the nation's defense by providing radiation hardened space electronics to ensure robust operations, protection of space capabilities, and effective aerospace persistence in a hostile space environment.

Zabinski was honored for opening new research areas, such as the creation of Tribology in Extreme Environments and Microelectromecanical Systems Nanotribology research programs. His understanding of the fundamentals of tribology and thin film deposition has led to the discovery of new materials and processes that have revolutionized friction and wear technology.

"It's with great pleasure that I announce our newest fellows. These seven men and women have shown great leadership and creativity in support of our nation's air and space force," said AFRL Commander Maj. Gen. Paul D. Nielsen. "Through their innovation and drive, they are keeping

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America's Air Force the best in the world. I am extremely proud to have them as part of the AFRL team and to be able to recognize their productive and innovative careers by their selection as AFRL Fellows."

The selection committee considers both military and civilian scientists and engineers. To be eligible, participants must be assigned to AFRL for the past three consecutive years and have at least seven years of federal service.

The AFRL Fellows program is designed to recognize and reward the laboratory's most outstanding in-house scientists and engineers for their accomplishments and technical excellence.

This year's fellows will be honored Sept. 17 at the Ervin J. Nutter Center, Dayton. @